

IN THE CLAIMS

Claim 1. (Currently Amended) A process for modifying starch by comprising:

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heating starch with at least one cationic polymer in an aqueous medium to temperatures above the gelatinization temperature of said starch, ~~which comprises selecting said starch wherein the starch is selected~~ from the group consisting of the native starches, the oxidized native starches, the starch ethers, the starch esters, the anionic starches of oxidized starch ethers; and the oxidized starch esters, the cationic modified starches and the amphoteric starches and effecting said modifying of said starch in the presence of a combination of

(a) a polymeric cationizer selected from the group consisting of ~~the~~ polymers containing vinylamine units and having ~~molar masses~~ molecular weights Mw of up to 1 million, ~~the~~ polyethyleneimines, polydiallyldimethylammonium chlorides, condensates of dimethylamine with epichlorohydrin or dichloroalkanes, condensates of dichloroethane and ammonia, and mixtures thereof; ; and

(b) a polymeric papermaking drainage ~~aids~~ aid selected from the group consisting of ~~the~~ a water-soluble crosslinked ~~polyamidoamines~~ polyamidoamine with or without an ethyleneimine graft, ~~the polymers~~ a polymer containing acrylamide and/or methacrylamide units and having ~~molar masses~~ a molecular weight Mw of more than 1 million, ~~the polymers~~ a polymer containing vinylamine units and having ~~molar masses~~ a molecular weight Mw of more than 1 million, and ~~the~~ mixtures thereof.

Claim 2. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein

(a) said polymeric cationizer is selected from the group consisting of polyethyleneimines, ~~and/or~~ polymers containing vinylamine units and having ~~molar masses~~ molecular weights Mw of up to 1 million, and

(b) said polymeric drainage ~~aids are~~ aid is selected from the group consisting of a water-soluble, ethyleneimine-grafted, a crosslinked polyamidoamines polyamidoamine, a polymer polymers containing vinylamine units and having ~~molar masses~~ a molecular weight Mw of ranging from 1.2 to 30 million, ~~and a cationic polyacrylamides polyacrylamide~~ or nonionic ~~polyacrylamides polyacrylamide~~ which each ~~have~~ having ~~molar masses~~ a molecular weight Mw of not less than 1.5 million.

Claim 3. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said starch is a native starch.

Be Cont Claim 4. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said starch is selected from the group consisting of the starch ethers, the starch esters, the oxidized native starch, and the anionic starches of oxidized starch ethers and ~~the~~ oxidized starch esters.

Claim 5. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said starch is an anionic starch ~~is used~~.

Claim 6. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said starch is an anionic starch ~~that~~ contains carboxyl, phosphate or sulfate groups or the respective alkali metal or ammonium salts thereof.

Claim 7. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said anionic starch is a carboxyl- and/or carboxylato-containing starch from potatoes, maize, wheat or tapioca.

Claim 8. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said starch is heated in said aqueous medium to 115 - 170°C under superatmospheric pressure.

Claim 9. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein said heating of said starch is effected with at least one polymeric cationizer and at least one polymeric drainage aid in a jet cooker at a temperature ranging from 120 to 150° C in the

course of from 0.01 sec to 30 minutes.

Claim 10. (Currently Amended) ~~A~~ The process as claimed in Claim 1, wherein, based on 100 parts by weight of starch, from 0.1 to 10 parts by weight of at least one polymeric cationizer (a) is combined with ~~and~~ from 0.01 to 2 parts by weight of at least one drainage aid (b) ~~are used for the modification of said starch.~~

Claim 11. (Currently Amended) ~~A Reaction products~~ reaction product of starch with a cationic polymers; polymer obtainable by the process of Claim 1.

Claim 12. (Cancelled).

Claim 13. (Currently Amended) A process for producing paper, paperboard ~~and or~~ cardboard, comprising:

of high dry strength by adding a dry strength enhancer prepared by the process of Claim 1 to the a paper stock, and
draining said treated paper stock onto with sheet formation on a sieve which results in the formation of a sheet on the sieve, thereby forming a paper, paperboard or cardboard of improved dry strength which comprises using a dry strength enhancer comprising a reaction product obtainable as claimed in claim 1.

Claim 14. (New) The process as claimed in Claim 1, wherein said drainage aid is a copolymer prepared by reacting:

- i) from 70 to 97 % by weight of acrylamide and/or methacrylamide,
- ii) from 2 to 20 % by weight of N-vinylimidazoline or N-vinyl-2-methylimidazoline, salts of these monomers and/or alkylator-quaternized N-vinylimidazoline or N-vinyl-2-methylimidazoline, and
- iii) from 1 to 10 % by weight of N-vinylimidazole.

Claim 15. (New) The process as claimed in Claim 1, wherein said drainage aid is a

copolymer prepared by reacting:

- i) from 1 to 99 mol % of (meth)acrylamide with
- ii) from 99 to 1 mol % of a dialkylaminoalkyl(meth)acrylamide.

Claim 16. (New) The process as claimed in Claim 1, wherein the pH of the starch modification reactions ranges from 2.0 to 9.0.

B1 Claim 17. (New) The process as claimed in Claim 1, wherein said polyamidoamine drainage aid has from 1 to 50 ethylenimine units grafted thereon per basic nitrogen atom of the polyamidoamine.

Claim 18. (New) A paper, paperboard or cardboard product, comprising:
a paper, paperboard or cardboard modified with from 0.5 to 8.0 % by weight of the reaction product of Claim 11.